

ABSTRACT

Liquid-vapour distribution device for use in two-phase concurrent down-flow vessels, having a level, horizontal tray being perforated with holes, each perforation through the horizontal tray being fitted with a vapour lift tube, the vapour lift tube including at least one elongated up-flow leg and one down-flow leg creating at least one up-flow zone and a down-flow zone between the up-flow zone and down-flow zone, and a bluff body being arranged within the transition zone and/or in a region of the upflow or down-flow zone adjacent to the transition zone of the vapour lift tube.